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### Risk factors for cot death increase danger from infection

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## Open letter to Tony Blair: Call to prevent escalating violence

EDITOR—Three important reports have been published in the past month on the humanitarian impacts of international violence and conflict.<sup>1-3</sup> All provide evidence of the short and long term adverse health impacts of the use of force internationally. The World Health Organization's *World Report on Violence and Health* is a detailed assessment compiled over three years by international health scientists.<sup>1</sup> *Collateral Damage: The Health and Environmental Costs of War on Iraq* is a report of a study by Medact, a UK charity of nurses, doctors, and other health professionals.<sup>2</sup> The latest report released by the Campaign Against Sanctions on Iraq (CASI) based at Cambridge University, is a UN report on likely humanitarian scenarios of war on Iraq.<sup>3</sup>

Medact estimates that if the threatened war on Iraq ensues, "total possible deaths on all sides during conflict and in the following three months will range from 48 000 to over 260 000. Civil war within Iraq could add another 20 000 deaths. Additional later deaths from postwar adverse health effects could reach 200 000. In all scenarios the majority of casualties will be civilians." The report calculates that "the aftermath of a 'conventional' war could include civil war, famine and epidemics, refugees and displaced people, and catastrophic effects on children's health and development." Knock-on effects could include exacerbation of international conflicts, inequalities, and divisions.

The most recent UN report also estimates substantial and wide-reaching humanitarian impacts: "As many as 500 000 people could require treatment to a greater or lesser degree as a result of direct or indirect injuries," on the basis of the WHO's estimates of 100 000 direct and 400 000 indirect casualties. It indicates existing shortages of some medical items, "rendering the existing stocks inadequate" for war increased demand, and exacerbated by the "likely absence of a functioning primary health care system in a post-conflict situation."

The report also "estimated that the nutritional status of some 3.03 million people countrywide will be dire and that they will require therapeutic feeding [according to Unicef's estimates]." Finally, "it is estimated that there will eventually be

some 900 000 Iraqi refugees requiring assistance, of whom 100 000 will be in need of immediate assistance [according to the United Nations High Commissioner for Refugees (UNHCR)] ... An estimated 2 million people will require some assistance with shelter." For 130 000 existing refugees in Iraq "it is probable that UNHCR will initially be unable to provide the support required."

But the most worrying impact of the use of force in Iraq and internationally is in its role as an escalator of collective violence. The WHO defines "collective violence"—by states or non governmental groups—as: "The instrumental use of violence by people who identify themselves as members of a group—whether this group is transitory or has a more permanent identity—against another group or set of individuals, in order to achieve political, economic or social objectives." The WHO reports that such collective use of force has long term negative impacts on stability and social wellbeing. International violence has been steadily increasing and "overall a total of 72 million people are believed to have lost their lives during the 20th century due to conflict, with an additional 52 million lives lost through genocides." Conflict escalates after use of collective force, as violence becomes a more common and legitimated form of political or social action.

Health professionals worldwide care for the casualties of war. We accept this responsibility. However, it is also our responsibility to argue for prevention of violence and peaceful resolution of conflict. Staff and students of the London School of Hygiene and Tropical Medicine come from and work in over 120 countries, many in conflict. Our experience and evidence corroborate the views of the WHO, United Nations, and Medact.

We believe that a war would have disastrous short, medium, and long term social and public health consequences—not just for Iraq, but internationally. Conflict is rooted in inequality and unjust governance. Military intervention in Iraq, when there remain so many peaceful routes to disarmament, risks escalating collective violence. The WHO argues that conflict can be averted only by more equitable forms of development and by accountable, ethical governance internationally. We strongly support this perspective and believe that further acts of violence can be prevented by

international and local governance that shows itself to be peaceful and ethical.

For the reasons above, we oppose the use of military intervention in Iraq. We hope this letter contributes to informed discussion among members of the government and the public. We also intend this statement to support all those who are opposed to military action on ethical and humanitarian grounds, not originating from any political or religious view point.

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On behalf of the staff, students, and alumni of the London School of Hygiene and Tropical Medicine, and in collaboration with Medact.

1 World Health Organization. World report on violence and health. Available at [www.who.int/violence\\_injury\\_prevention/main.cfm?p=0000000682](http://www.who.int/violence_injury_prevention/main.cfm?p=0000000682) (accessed 20 Jan 2003).

2 Medact. Collateral damage: the health and environmental costs of war on Iraq. Available at: [www.medact.org/tbx/pages/sub.cfm?id=556](http://www.medact.org/tbx/pages/sub.cfm?id=556) (accessed 20 Jan 2003).

3 Campaign Against Sanctions on Iraq (CASI). Internal UN report. Likely humanitarian scenarios. Available at: [www.casi.org.uk/info/undocs/war021210.pdf](http://www.casi.org.uk/info/undocs/war021210.pdf) (accessed 20 Jan 2003).

## Doctors and computers

See also p 202

### Poor system design and little investment mean hospital doctors do not use computers ...

EDITOR—Benson's article neatly summarises some of the difficulties hospital doctors have using computers.<sup>1</sup> I would enthusiastically use computers in hospitals if seven points applied.

- (1) Computers were readily available.
- (2) Security measures were sensible.
- (3) Email could be picked up both in the trust and at home or other work places.
- (4) Patient details or past letters were accessible so, for example, you could see an emergency referral with some idea of what had previously happened.
- (5) Pathology results could be viewed rapidly.
- (6) Medical records were readily accessible.
- (7) Access to the internet was good enough to allow, for example, reading of medical journals.

These measures would empower doctors and make computers useful. In the trust where I work the IT department has been starved of funds, is several hundred comput-

ers short, and is able to follow NHS guidelines only to the letter, with the following results.

(1) Seven junior doctors share one computer.

(2) Passwords are changed every 14 days. Many people forget their repeatedly updated passwords and so the IT helpdesk mainly deals with this problem (after the required form has been filled in, signed by a manager, and faxed to the desk). Alternatively, people write down their passwords.

(3) NHSnet does not enable email to be picked up at home, and external email cannot easily be picked up in the trust.

(4) Patient details or past letters are accessible only by secretaries or administrators, apparently for security and confidentiality reasons.

(5) Pathology results are on a different, inaccessible, system.

(6) Patient notes are on another, also inaccessible, system.

(7) Access to the internet is restricted.

Thus there is little incentive to use computers in this NHS trust. Disappointingly, the next tranche of investment of funds will once again be top down. Inevitably, a large information technology company will devour scarce resources to generate a system that works well for administrators and is not used by doctors because it does not do anything useful. However, I am sure that it will be secure and provide countless statistics.

What seems to be mainly lacking is resolve. The solution would be to involve doctors before designing or implementing a system. Most importantly, they should be listened to, which currently does not seem to happen.

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1 Benson T. Why general practitioners use computers and hospital doctors do not—Part 2: scalability. *BMJ* 2002;325:1090-3. (9 November.)

### ... while limited and uncoordinated development of information technology curtails general practitioners

**EDITOR**—I am amazed by the limited and uncoordinated development of information technology in the NHS.

In our rural general practice we are computer enthusiasts and have embraced every new development. Although we have the brand leader system, EMIS, we still cannot transfer patients' old notes electronically from their former general practitioners. When a patient joins our list we simply get a huge printout, months later, from any paperless practice the patient was with before.

We can obtain limited laboratory results from the hospital electronically, but the service remains unreliable. We receive only the results for tests we have requested, not those from tests ordered by consultants. Similarly, consultants do not have access to tests requested by general practitioners, although the trust is one of the three nationwide electronic patient record sites.

When I add a vaccination to a computer record it should automatically update the health authority's child immunisation records and the local community trust's child health records. Instead I complete a paper form and waste time every quarter comparing our database manually with those of the two organisations and upgrading them both.

We are also not linked to the hospital in any meaningful way. I can email the world at the touch of a button, but I cannot find out from six miles (10 km) down the road basic information such as changes in drug treatment. We have tried to add all hospital numbers to our system as we receive correspondence, which is time consuming and inefficient. However, global data are not available to upgrade our system in one fell swoop because the computers cannot talk to each other under the Data Protection Act. The health authority database is fairly robust and has been linked to general practice systems for years, but the community trust and hospitals are unable to access it. Thus we continue to develop duplicate systems but not the long planned national database based on NHS numbers.

Primary care has generally led secondary care in computerisation, but if primary care is not joined up, how can we expect hospitals, all developing their own solutions independently, to do any better? The prospects for improved electronic communication between primary care and secondary care must be even more bleak.

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## Rethinking management

### Fundamental rethink of medical management is needed

**EDITOR**—Smith in his editorial on the rejection of the proposed consultant contract in England and Wales cites as a principal cause the widespread distrust among clinicians of hospital managers.<sup>1</sup> In the same edition, Houghton et al identify a lack of adequate training in writing business plans, negotiating change, and getting things done as specific difficulties for newly appointed consultants.<sup>2</sup>

Clinicians are often thrust into senior management positions with major responsibilities for substantial budgets without the necessary financial know-how. A fundamental rethink of medical management is called for. What is needed is the development of a distinct career track in medical management at a much earlier stage, with the necessary management training on a par with that available in the commercial sector. This model has worked well in Australia. Such medical managerial posts will need adequate sessional commitments for these managers to provide a high quality of executive function. A professional cadre of medically qualified managers in touch with clinicians involved in the delivery of service, setting realistic targets

for service delivery in partnership with lay hospital managers, might restore the trust of the medical profession and deliver the standards of care to which the government aspires.

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1 Smith R. Take back your mink, take back your pearls. *BMJ* 2002;325:1047-8. (9 November.)

2 Houghton A, Peters T, Bolton J. Career focus. What do new consultants have to say? *BMJ* 2002; 325(classified suppl):145-7. (9 November 2002.)

### Changes seem to be ignored in health industry

**EDITOR**—Smith's analysis of the reaction to the consultant contract does not address the question "Have we got the role of management right?"<sup>1</sup>

Although health services are clearly a personal professional service industry, reforms over the past decades have been based largely on the production industry. In the meantime, many other industries have been realising that professional services, with their central reliance on knowledge, require a very different organisational structure and style of management than has been traditionally accepted as the norm. These changes entail a structural shift from hierarchy to networks, a change in relationships from formal to informal, and shifts of power from managers to the professionals.

Yet these changes seem to be ignored in the health industry, which is moving further towards formal hierarchical control. Why is this?

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### Consistent criteria need to be applied to rationing decisions

**EDITOR**—Smith notes that a central reason for consultants rejecting the new contract was the distrust of managers' control and in particular their pursuit of targets that distort good care.<sup>1</sup> Some consultants have claimed that the target to reduce maximum waiting times has led to managers pressuring them to treat patients out of turn from the point of view of clinical urgency.

This would be a very serious charge if it was not demonstrably the case that a good deal of variation exists between consultants' clinical (for which also read, priority setting or rationing) decisions when it comes to admitting patients from their waiting list and choosing which patients to add to their surgical lists each week. The recent Audit Commission report on access to ear, nose, and throat services is just the latest evidence of such variation.<sup>2</sup> This showed that for grommet operations, for example, all ear, nose, and throat consultants in one trust considered that no such operations needed to be carried out within three months, whereas in another trust the consultants were of the reverse opinion.

The point here—and the issue for managers struggling to ensure that patients do not wait unreasonable lengths of time for their operations—is that more consistent (and rational) criteria need to be applied to key rationing decisions. Allowing all consultants complete freedom to make such decisions will not, on past and current experience, lead to an equitable outcome for patients in terms of waiting times.

As Smith rightly points out, however, doctors, managers, and everyone else working in the NHS are all in this together. Although no employee wants to feel exploited, no one should take his or her eye off the ball: patients are what matters, and many, rightly, believe that they wait unnecessarily long periods of time for their NHS care. The much derided government targets on waiting times merely reflect what patients want—and, it could be argued, what they need in terms of their health.

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1 Smith R. Take back your mink, take back your pearls. *BMJ* 2002;325:1047-8. (9 November.)

2 Audit Commission. *Access to care: ear, nose and throat and audiology services*. London: Audit Commission, 2002.

### I'm losing my religion

EDITOR—Smith says that we must remember that the future will depend on working together.<sup>1</sup> I think he is right for those who want to stay and work together.

Working time directives; diminishing numbers of applicants to medical schools; gung-ho GMC malpractice lawsuits rising at 10-15% per year; a tidal wave of medical legislation, regulations, and policies; quangos dabbling left right and centre; the shockwaves from Bristol and Shipman; a sense of bullying as a means of getting things done; racism; nepotism; massive spin doctoring about everything under the sun; regular media feeding frenzies when doctors mess up—who, for all the love of money and wonderful contracts, would want to take up such work for the next 30 years? Exchange glowing youth for a chance to have triple bypass surgery—if you're lucky?

Only the best. "The best of the best, of course. Only those who love that challenge. The go-getting type A personalities. Those with real leadership qualities. Not the faint hearted," shouts some deluded spin doctor from on high.

Somebody has got to do the job. It's no better anywhere else—is it? So, Mr Young Bright Eyed and Bushy Tailed Doctor—go for it. Trapped by a massive mortgage in a superinflated housing market; a few mouths that you feed but hardly ever see; your fancy sports car; a significantly higher than average risk of depression, alcoholism, and suicide; a one in three (or better) chance of eventually paying alimony or child support, or both; and the noose of a big fat pension in your later years—you'll be a very good boy. You'll be right up there, working together with them—rationing healthcare and humanity. Good for you.

Some will create opportunities elsewhere for a better lifestyle. Spare me the

mantras from "Improving working lives"—too little, too late, and spin laden as usual. I'm sure many more of us whingers who care about our health and life expectancy will follow, to places where we're no obstacle to progress or working together. Good for us. Good for everyone.

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1 Smith R. Take back your mink, take back your pearls. *BMJ* 2002;325:1047-8. (9 November.)

### Risk factors for cot death increase danger from infection

EDITOR—Tappin et al found an increased risk of the sudden infant death syndrome in infants who slept on used mattresses, which was further increased if the used mattress was from another home.<sup>1</sup> They say that the increased risk might be associated with toxigenic species of bacteria, such as *Staphylococcus aureus*, which grow well in body fluids that contaminate mattresses.

We identified pyrogenic toxins of *S aureus* in over half of the tissue samples from infants who died of the sudden infant death syndrome in five different countries.<sup>2,3</sup> The increased risk for sudden death associated with used mattresses might be due in part to colonisation of infants by toxigenic strains against which the infants have no passive or active immunity.

The higher risk associated with mattresses obtained from other homes might be related to introducing strains producing toxins different from those colonising the members of the infant's immediate family. Young infants obtain their normal flora mainly from their mothers, from whom they also obtain passive antibody protection against these micro-organisms and their toxins. We used an enzyme linked immunosorbent assay (ELISA)<sup>3</sup> to assess toxin production among staphylococcal isolates obtained from 106 infants dying of the sudden infant death syndrome and 150 healthy infants. Among 116 pairs of *S aureus* isolates from healthy infants and their mothers, 59 had the same pattern of toxin production. The proportion of toxin producing isolates was not significantly different in the infants who died (55/106, 52%) and the healthy infants (96/150, 64%) ( $P=0.052$ ). The proportions of specific toxins detected differed significantly between the two populations ( $\chi^2=21.62$ ,  $df=3$ ,  $P<0.0001$ ) (table).<sup>2</sup>

The increased risk associated with used cot mattresses might be due in part to

increased exposure to toxigenic strains against which the infant lacks antibodies, but these observations must be assessed in relation to other major risk factors such as sleeping prone. Staphylococcal toxins cannot be dismissed as postmortem contamination because they are produced only between 37°C and 40°C, which is above the normal nasopharyngeal temperature of children.

Overheating or minor respiratory infection might increase the nasopharyngeal temperature to the range in which toxins are produced. Children lying prone have notable increases in nasal temperatures, and temperatures of 37°C or higher have been recorded in some after 30 minutes in the prone position.<sup>4</sup> A large study of sudden infant death syndrome in Scandinavia concluded that the risk factors for the syndrome increase the dangerousness of infection in infancy.<sup>5</sup> The findings of Tappin et al are another piece of evidence to support this hypothesis.

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1 Tappin D, Brooke H, Ecob R, Gibson A. Used infant mattresses and sudden infant death syndrome in Scotland: case-control study. *BMJ* 2002;325:1007-12. (2 November.)

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### Long term effects of advice to reduce dietary salt

#### Front cover was highly misleading

EDITOR—That small reductions in salt intake (2 g/day) have a small but significant effect on blood pressure is hardly surprising.<sup>1</sup> Nevertheless, in populations this would have a large effect on reducing strokes, heart attacks, and heart failure.

Hooper et al do not ask why reducing salt intake in the long term is so difficult. They claim that the interventions used were intensive, but most studies gave no details

Toxins detected in culture supernatant of *Staphylococcus aureus* strains isolated from healthy control infants and infants dying of sudden infant death syndrome. Some strains produced more than one toxin

Toxin	Infants with sudden infant death syndrome (n=106)	Control infants (n=150)
Staphylococcal enterotoxin A	13 (12.3)	41 (27.3)
Staphylococcal enterotoxin B	34 (32.1)	48 (32.0)
Staphylococcal enterotoxin C <sub>1</sub>	35 (33.0)	34 (22.7)
Toxic shock syndrome toxin 1	5 (4.7)	37 (34.7)



about what advice was offered. Furthermore, 75% of salt intake comes from processed food.<sup>2</sup> This needs to be avoided or contain less salt. None of the studies provided reduced salt foods.

Interpreting the study by Hooper et al is not helped by the editor writing the front cover of the *BMJ*, who seems to have read a different paper and misinterpreted the important positive findings. The confusion is increased by the authors' press release,<sup>3</sup> which rightly blames the difficulty in reducing salt intake squarely on the food industry.

This confusion is compounded by errors in the meta-analysis. For example, the 18 month TOPH trial (phase I) was included as an intervention trial over "60 months," but salt intake was reduced for only 18 months, after which all participants returned to their normal diet. References were misquoted, and the correspondence following these papers was ignored. The totality of evidence for reducing salt is stronger than for any other non-pharmacological treatment.

Ninety five per cent of the population are at risk of developing cardiovascular disease,<sup>4</sup> and 40% die from it. There are no controlled trials showing a reduction in mortality on stopping smoking, reducing fat intake alone (without fish oil supplements), reducing salt intake, losing weight, increasing fruit and vegetable consumption, or increasing exercise. For most of these factors no attempt has been made to conduct long term trials, owing to the innate difficulty of conducting and funding such trials and, now, the ethics of randomly putting a group of people on a high salt diet for the rest of their lives. The question that Hooper et al need to consider is what strength of evidence is needed to give dietary and lifestyle advice to try to prevent cardiovascular disease.

The study indicates the importance of reducing salt intake in the population, even by small amounts, particularly in treating high blood pressure.<sup>5</sup> The *BMJ* should publish a retraction of its misleading front cover and read the authors' press release.

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Competing interests: None declared.

1 Hooper L, Bartlett C, Davey Smith G, Ebrahim S. Systematic review of long term effects of advice to reduce dietary salt in adults. *BMJ* 2002;325:628-32. (21 September.)

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## Critical faculties should always be exercised

**EDITOR**—The paper by Hooper et al on the long term effects of advice to reduce salt intake in adults adds nothing new to the literature.<sup>1</sup> Substantial evidence accumulated over several decades shows that reducing salt intake lowers blood pressure.<sup>2</sup>

It has also been clear for many years that advice targeted at individuals will not produce substantial and sustained reductions in salt intake as most salt in the diet is added by the food industry to processed food such as bread, cooked meat, and breakfast cereals.<sup>2</sup> Data on mortality and cardiovascular events from sodium restriction trials are indeed limited, an important issue that has been highlighted repeatedly in the literature in recent years.

The discussion section of the paper by Hooper et al has elements of spin worthy of tabloid journalism, with selective and uncritical citation of relevant papers and a lack of context. The arguments seem largely based on a simplistic, individually based model of health promotion. Only cursory reference is made to the fact that dietary salt restriction is a population health issue that needs to be tackled in populations, by both regulation and collaborative work with the food industry.

The authors raise the spectre of possible harm from sodium restriction, raising the possibility of adverse effects on cardiovascular disease and all cause mortality. This speculation, which goes well beyond the clinical trial data, is largely based on two papers by Alderman et al that are widely regarded as methodologically flawed and have been extensively criticised in correspondence and reviews.<sup>3-4</sup> Hooper et al do

not cite the paper by Tuomilehto et al, which links higher dietary salt intake with increased risk of cardiovascular events and increased mortality.<sup>5</sup> Given that the current high dietary salt intake among children and adults can largely be attributed to salt added to processed food at concentrations well in excess of physiological requirements, the notion that efforts to achieve modest reductions in salt intake will have adverse effects on health is implausible to say the least. Meta-analysis is a powerful tool, but it does not absolve its practitioners from the need to exercise their critical faculties.

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1 Hooper L, Bartlett C, Davey Smith G, Ebrahim S. Systematic review of long term effects of advice to reduce dietary salt in adults. *BMJ* 2002;325:628-32. (21 September.)

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## Salt needs to be reduced in manufacturing and processing food

**EDITOR**—Hooper et al in their meta-analysis of randomised trials of individual dietary advice to reduce salt intake conclude that such intervention will have little effect on health.<sup>1</sup> They do not satisfactorily distinguish whether salt reduction itself confers only a small benefit or a large one, but people do not materially reduce their salt intake. As a result readers may conclude from the paper that reducing salt intake is unimportant.

This is not so. Reducing the current average salt consumption in Britain by 3 g/day (about one third) would reduce average blood pressure by about 5 mm Hg systolic in people over 50 and thereby reduce the incidence of heart attack and strokes by about 15% and 22% respectively.<sup>2</sup> A reduction of 6 g/day would reduce blood pressure by about twice as much with a corresponding additional reduction in the incidence of heart attacks and stroke. Reducing salt intake generally would thus have a major impact in the prevention of cardiovascular disease.

The obstacle to prevention is that nearly all the salt we eat is hidden, added to many foods in manufacturing and processing. Only about 15% is discretionary in that an individual can alter his or her intake through their own cooking and addition at meals. It is not therefore surprising that trials of advising people to reduce salt intake have little effect.

When salt intake is reduced blood pressure falls. Trials that show this best were not included in the meta-analysis of Hooper et al. They were trials in which dietary advice was reinforced by the provision of low salt staple foods such as bread, a major contributor to hidden salt in the national diet.<sup>3-5</sup>

While the effect of avoiding discretionary salt is small it is achievable and worth while. Unfortunately it will have been underestimated in the analysis of Hooper et al because the trial participants included people who had already taken steps to avoid using discretionary salt, thereby diluting the effect.

The analysis of these trials by Hooper et al and the conclusions drawn are uninformative other than confirming the observation that little is gained by individual dietary advice. The public health challenge is to reduce salt used in the manufacturing and processing of food. Over 10-15 years, salt intake could be reduced by two thirds. This would cause no untoward effects and confer substantial health benefits.

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- 1 Hooper L, Bartlett C, Davey Smith G, Ebrahim S. Systematic review of long term effects of advice to reduce dietary salt in adults. *BMJ* 2002;325:628-32. (21 September.)
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### Authors' reply

EDITOR—We asked, "What are the long term effects on health and blood pressure of advice to reduce dietary salt intake?" and not, as commentators seem to imagine, "Can salt reduction lower blood pressure?" or "What would be the effect of reducing salt in processed foods?" We showed that advice does reduce urinary sodium excretion by about a quarter and this produces a 1 mm Hg fall in systolic blood pressure at 13-60 months.

Contrary to MacGregor and He's assertion, interventions provided by four studies (including 3007 of the 3514 participants) were well documented and highly intensive. It was not an error to use the 60 month outcomes of the TOHP phase I trial: although its 18 month intervention period had ended, there was no indication that all participants had returned to their normal diet. The point of such intensive intervention is precisely to encourage lifelong dietary change, and the authors clearly felt this was the case as they followed up participants to 60 months.

Potential harms of a reduced sodium diet do need discussion. Raised concentrations of low density lipoprotein cholesterol were highlighted in Graudal et al's systematic review,<sup>1</sup> and the evidence on mortality from three large cohort studies should not be dismissed as inconvenient. We cited the paper by Tuomilehto et al, which showed protective effects of low salt diets, to give a balanced account of the debate and draw attention to inconsistencies in the evidence.

We excluded short duration trials of salt restriction because these are not relevant to the question we posed and some may not be generalisable. At least seven trials conducted by MacGregor's group have produced mean blood pressure reductions that are greater than the upper 95% confidence interval of the effects found in meta-analysis of over 50

trials of salt restriction.<sup>2</sup> The reasons for such wide divergence remain of interest and have not been adequately explained.<sup>3</sup>

Law and Wald's estimate of the effect of salt restriction on blood pressure is extremely optimistic compared with other systematic reviews and has been more often cited (table).<sup>4</sup> Their meta-analysis, which included 78 studies of salt restriction, only 10 of which were randomised, uses its own methodology.<sup>4</sup> Effects about an order of magnitude greater than those reported by other meta-analyses were found.

Reduced sodium foods may be helpful. Only one of the studies in our review provided low salt foods for its intervention group throughout and recorded large reductions in blood pressure, but, as anti-hypertensive drugs also altered during the study, interpretation is difficult.

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Competing interests: LH owns 285 shares in West Indies Rum Distillery, Barbados.

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## Indian objection to export of human tissue for research

### Clarifications from authors of study

EDITOR—With reference to our recent paper in the *Proceedings of the National Academy of Sciences* on the mutation rate of mtDNA, Murdur says that Indian scientists are accusing the

foreign researchers of violating the national guidelines.<sup>1,2</sup> He omitted, however, to make any mention of the first author of our paper, Lucy Forster, who is herself Indian, from Kerala, where the thorium rich sand is located. The research formed the basis for her PhD dissertation.

None of the coauthors was aware of the guidelines to which your correspondent refers, neither have we now been able to find any mention of them on the website of the Indian Council of Medical Research. It is in any case not likely that the research in question as such would lead to a patent or other commercial applications. It does, however, lead to the interesting conclusion, relevant to human population history, that some high estimates for the mtDNA mutation rate are not well founded.

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- 1 Mudur G. Indian scientists object to export of human biological material for research. *BMJ* 2002;325:990. (2 November.)
- 2 Forster L, Forster P, Lutz-Bonengel S, Wilkomm H, Brinkmann B. Natural radioactivity and human mitochondrial DNA mutations. *Proc Natl Acad Sci* 2002;99:13950-4.

### Author's reply

EDITOR—Forster makes two new points: firstly, that I did not mention that the first author of the paper, Lucy Forster, is an Indian national, and secondly, that the guidelines are not available on the website of the Indian Council of Medical Research. His third point, that this research has no commercial application, is already covered in the news story.

While I was working on the story, I did bring up each of these points several times during my interviews with health officials and biologists in India who are accusing them of breaching guidelines. According to them, neither of these two points could be used to justify the violation of the guidelines. They said that researchers, whether Indian or international, taking out biological samples are expected to be aware of the guidelines. One person whom I had interviewed, a senior member of the bioethics committee of the Indian Council of Medical Research, in his response to this point, had said that ignorance of law—in this case guidelines—is never a valid excuse.

The absence of the guidelines on the council's website is unfortunate. I have already quoted Indian researchers in the story, saying that the Indian government has failed to implement these guidelines.

The other point, that Lucy Forster is an Indian national and that this work was part of her PhD dissertation, also does not change the story in any way. The fact remains, as Peter Forster acknowledged during my telephone interview with him, that no hospital or research centre in India ever participated in this study. The paper in *Proceedings of the National Academy of Sciences* does not list any collaborating Indian institution.<sup>1</sup> It identifies Lucy Forster as affiliated to the University of Cambridge and to the University of Münster

Numbers of citations of five systematic reviews of salt restriction and blood pressure. Updated from Swales<sup>5</sup>

	Law et al	Cutler et al	Midgley	Cutler	Graudal
Blood pressure reduction (mm Hg)	10/5	1.7/0.97	1.0/0.01	1.9/1.1	1.2/0.26
24 h urinary sodium excretion (mmol/l)	100	76	100	76	160
Year (No of citations)					
1991	10	9			
1992	15	5			
1993	18	11			
1994	20	9			
1995	26	7			
1996	21	14	11		
1997	32	20	33	12	
1998	23	6	19	6	10
Total to 2002	226	93	150	60	74

but not to any institution in India. Given that background, health officials and researchers here say that this is a case where foreign researchers have used local knowledge and expertise of an Indian national to access biological material from India.

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1 Forster L, Forster P, Lutz-Bonengel S, Wilkomm H, Brinkmann B. Natural radioactivity and human mitochondrial DNA mutations. *Proc Natl Acad Sci* 2002;99:13950-4.

### Problem is not that simple

EDITOR—After reading the news article by Mudur, and Forster's response to the same, I would like to make a few points.<sup>1</sup>

Firstly, Mudur's general statement that Indian scientists are accusing the foreign researchers of violating national guidelines is unfortunate. The article raises a valid point but does not address why the Indian Council of Medical Research and other such agencies have not monitored the export of biological material from India.

But it is also not apparent why Forster goes into a quasi-defence mode when he responds back. The first author, Lucy Forster, may be Indian by birth but that does not automatically give her the right to use biological material from India for research conducted under the auspices of foreign universities. She may have her PhD dissertation out of this, but that does not qualify her to use the material. So the statement about her Indian origins is irrelevant.

Forster is candid about his team's ignorance of the guidelines but in a way defends himself by the fact that the Indian Council of Medical Research's website did not contain it. In developing countries such as India, showcasing through the internet is but a new concept. So anything and everything about the Indian Council of Medical Research is not available on its site.

This is an Indian reality with which researchers on the ground ought to be familiar, as they probably were about currency conversion rates. Although their work did not have commercial implications that was known only after the publication came in. Biological samples can be used for research purposes in more than one way. So, if the callous attitude of the Indian establishment—to frame guidelines but not to implement them—remains, then in future biological materials may be taken out of India for projects not as non-commercial as Forster et al's endeavour.

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### Ethics dialogue between rich and poor countries is overdue

EDITOR—The agreement of the recent meeting organised by the European Group on

Medical Ethics—that there should be more dialogue between rich and poor countries on cross cultural ethical issues—is long overdue.<sup>1</sup> Experts on medical ethics in the developed world have consistently ignored conditions under which health care is provided in developing countries when making recommendations on ethical codes and guidelines, with the result that medical ethics is given little attention in their medical schools and may not be taught at all.

Recent UN intergovernmental conferences have been critical about unethical conduct by health professionals in developing countries towards vulnerable groups, which include most women and adolescents, many of whom now consult doctors only as a last resort.

The experts concerned, including those responsible for the Declaration of Helsinki and the guidelines of the Council for International Organisations of Medical Sciences, seem not to have realised that most people in the world live in developing countries. Many of them attend traditional healers—either exclusively or at the same time as they are attending practitioners of Western conventional medicine—and most do not regard themselves as bound by the tenets of Judaeo-Christian morality that form the basis of standard guidelines and codes of ethics in developed countries.

Those who have practised in developing countries are not surprised that choice is dictated by community elders or a woman's husband in communities where most people are illiterate. The whole community and the whole family, particularly husbands, are expected to be involved in the illness of a family member, who also expects this to be the case. Confidentiality and consent as dealt with in the standard ethical guidance produced in developed countries are not understood.

The disproportionate amount of attention paid by ethical experts to moral dilemmas arising from modern technology is largely irrelevant in developing countries, where such techniques are rarely possible or practicable. The ethical issues, particularly rights based issues, concerned with providing basic health care are, however, important. Ethical rulings that have been formulated without regard to local customs and situations are unlikely to be respected.

The statement from the meeting that the best available treatment (as defined by rich countries) is meaningless in communities where there is no access to treatment of any sort is only one example of the tunnel vision of Western ethicists. The consequences, in terms of restrictions on research into crucially important developments such as AIDS vaccines, are too serious to be ignored.

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1 Richards T. Developed countries should not impose ethics on other countries. *BMJ* 2002;325:796. (12 October.)

### Issues relating to abortions are complicated in Nigeria

EDITOR—Raufu's news item drawing attention to Nigeria, where 20 000 deaths are reported to occur every year as a result of mostly illegal abortions, calls for definite remedial action.<sup>1</sup> I commend the dean of the medical school at Benin University and the Society for Gynaecology and Obstetrics in Nigeria for drawing attention yet again to this important cause of morbidity and mortality in the country.

None of the responses to the news item on *bmj.com* considered the complex social and religious milieu in which Nigerians live. It is not the absence or paucity of medical expertise, health education, or activity by non-governmental organisations that drives pregnant girls to underground abortion clinics. Very strong cultural and religious stigmas are associated with extramarital sex in all regions of the country: not only Islam but also the Roman Catholic Church strongly oppose liberalisation of abortion. To legislate on abortion is a very tall order in Nigeria.

Islam presents particular difficulties because people who adhere to it are bound absolutely by the teachings of the Koran, which strictly forbids sex outside marriage. Most Nigerians are Muslim, but that is not the problem. Among Muslims, a large body of people well versed in both Western and Islamic education can promote better understanding of the Koran's injunctions and the teachings of the prophet Mohammed. Unfortunately, the religious agenda has been hijacked by a small body of ill informed fanatics who prefer to misinterpret the facts. For example, regarding the introduction of Islamic sharia law in Nigeria, nowhere is it mentioned in the Koran that people convicted of fornication should be stoned to death.

It is imperative to do something about the appalling annual death rate from abortion in Nigeria, but success can come about only if the matter is approached with due sensitivity and consideration for these cultural and religious factors.

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1 Raufu A. Unsafe abortions cause 20 000 deaths a year in Nigeria. *BMJ* 2002;325:988. (2 November.)

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